

## AMENDMENTS TO THE CLAIMS

A30 1. (Currently Amended) A data processing method for storing or transmitting a plurality of object data and scene description data, wherein: the plurality of object data respectively corresponding correspond to a plurality of objects which compose a scene; the plurality of object data and including includes object data as video data or audio data; and the scene description data which describes how the plurality objects compose the scene, said method comprising:

~~an encryption step~~ for encrypting at least object data corresponding to specified objects which are predetermined among the plurality of objects; and

~~a data output step~~ for outputting respective object data and the scene description data to a storage medium or a transmission medium.

2. (Currently Amended) The data processing method of Claim 1, wherein

~~in said data output step,~~ outputting includes storing encryption identifiers, each indicating whether or not object data of a corresponding object included in the plurality of objects has been encrypted, ~~are stored~~ in the scene description data and ~~output~~ outputting the encryption identifiers to the storage medium or the transmission medium.

3. (Currently Amended) The data processing method of Claim 1, wherein

~~in said data output step,~~ outputting includes storing control information required for encryption ~~is stored~~ in the scene description data and ~~output~~ outputting the control information to the storage medium or the transmission medium.

4. (Currently Amended) The data processing method of Claim 1, wherein

~~in said encryption step,~~ encrypting includes encrypting only object data of the specified objects which is predetermined among the scene description data and the plurality of object data, ~~is encrypted~~.

5. (Currently Amended) The data processing method of Claim 1, wherein  
in said ~~encryption step, when encrypting the object data of the specified objects,~~ encrypting  
includes using plural different control information for the respective specified objects is used as  
control information required for encrypting the respective object data when encrypting the object  
data of the specified objects.

6. (Currently Amended) The data processing method of Claim 1, wherein  
in said ~~encryption step,~~ encrypting includes changing a type of control information required  
for encryption ~~is changed~~ with elapse of time after encryption of the object data starts.

7. (Currently Amended) A data processing method for storing or transmitting a plurality of  
object data and scene description data, wherein: the plurality of object data respectively  
corresponding correspond to a plurality of objects which compose a scene ~~and including; the~~  
plurality of object data includes object data as video data or audio data; and the scene description  
data ~~which~~ describes how the plurality objects compose the scene, said method comprising:

~~a compression step for~~ compressing object data corresponding to each of the plurality of  
objects which compose the scene and outputting compressed object data;

~~an encryption step for~~ sequentially encrypting at least compressed object data corresponding  
to specified objects which are predetermined among the plurality of objects, according to control  
information for encryption of respective object data corresponding to the specified objects; and

~~a data output step for~~ outputting respective compressed object data and the scene description  
data to ~~the~~ a storage medium or ~~the~~ a transmission medium, wherein

in said ~~encryption step~~ encrypting includes encrypting, control information for a target object  
corresponding to object data to be encrypted ~~is encrypted~~ according to control information for an  
encrypted object corresponding to previously encrypted object data, and adding encrypted control  
information ~~is added~~ to the previously encrypted object data.

8. (Currently Amended) A data processing method for storing or transmitting a plurality of object data and scene description data, wherein: the plurality of object data respectively corresponding correspond to a plurality of objects which compose a scene ~~and including~~; the plurality of object data includes object data as video data or audio data;; and the scene description data which describes how the plurality objects compose the scene, said method comprising:

~~a compression step~~ for compressing object data corresponding to each of the plurality of objects which compose the scene, and outputting compressed object data;

~~an encryption step~~ for sequentially encrypting at least compressed object data corresponding to specified objects which are predetermined among the plurality of objects according to first control information for encryption; and

~~a data output step~~ for outputting respective compressed object data and the scene description data to ~~the~~ a storage medium or ~~the~~ a transmission medium, wherein

said ~~encryption step~~ encrypting includes encrypting the first control information according to second control information for encryption, dividing encrypted first control information into a plurality of information parts respectively corresponding to the specified objects, and adding the plurality of information parts to the object data of the specified objects, respectively.

9. (Currently Amended) A data processing apparatus for storing or transmitting a plurality of object data and scene description data, wherein: the plurality of object data respectively corresponding correspond to a plurality of objects which compose a scene ~~and including~~; the plurality of object data includes object data as video data or audio data;; and the scene description data which describes how the plurality objects compose the scene, said apparatus comprising:

a plurality of data ~~compression means~~ compressors respectively provided for the plurality of objects, ~~for compressing operable to compress~~ respective the plurality of object data, respectively, and outputting output respective compressed object data;

~~multiplexing means for multiplexing~~ a multiplexor operable to multiplex the scene description data and the respective compressed object data as individual streams and outputting output a multiplexed bit stream; and

A38 encryption means for encrypting an encryptor operable to encrypt individual streams in the multiplexed bit stream which correspond to specified objects which are predetermined among the plurality of objects, to produce an encrypted bit stream, wherein

the encrypted bit stream is output to ~~the~~ a data storage medium or ~~the~~ a data transmission medium.

---

Claims 10-11 (Canceled)

---

A38 12. (Currently Amended) A data storage medium which contains a data processing program for making a computer perform data processing for a scene selection data and a plurality of object data, wherein: the plurality of object data respectively corresponding correspond to a plurality of objects which compose a scene ~~and including~~; the plurality of object data includes object data as video data or audio data; and the scene description data which describes how the plurality objects compose the scene, said data processing program comprising:

an encryption ~~step for~~ section operable to instruct the computer to encrypting encrypt at least object data corresponding to specified objects which are predetermined among the plurality of objects; and

a data output ~~step for~~ section operable to instruct the computer to outputting output respective object data and the scene description data to a storage medium or a transmission medium.

13. (Currently Amended) A data storage medium for storing digital data used for reproducing a scene, wherein

said digital data includes scene description data and a plurality of object data, wherein: the plurality of object data respectively corresponding correspond to a plurality of objects which compose the scene ~~and including~~; the plurality of object data includes object data as video data or audio data; and the scene description data which describes how the plurality objects compose the scene, and is said digital data includes data obtained by encrypting, from among the scene description data and the plurality of object data, at least predetermined object data corresponding to

A31  
specified objects ~~which~~, and the predetermined object data is predetermined among the plurality of object data ~~and the scene description data~~.

---

Claims 14-15 (Canceled)

---

A32  
16. (Currently Amended) The data processing method of Claim ~~15~~ 28, wherein  
when said deciding indicates that the compressed and encrypted object data is reproducible,  
the compressed and encrypted object data corresponding to all the specified objects can be read from  
the storage medium or can be received through the transmission medium.

17. (Currently Amended) The data processing method of Claim ~~15~~ 28, wherein  
when said deciding indicates that the compressed and encrypted object data is reproducible,  
the scene description data has been read from the storage medium or received through the  
transmission medium, and the compressed and encrypted object data corresponding to all the  
specified objects can be read from the storage medium or can be received through the transmission  
medium.

18. (Currently Amended) The data processing method of Claim ~~15~~ 28, wherein  
when said deciding indicates that the compressed and encrypted object data is reproducible,  
the scene description data has been read from the storage medium or received through the  
transmission medium and all object data including the compressed and encrypted object data  
corresponding to the specified objects can be read from the storage medium or can be received  
through the transmission medium.

19. (Currently Amended) The data processing method of Claim ~~15~~ 28, wherein  
when said deciding indicated that the compressed and encrypted object data is reproducible,  
the scene description data and object data corresponding to all objects which compose the scene have  
been read from the storage medium or received through the transmission medium.

---

Claims 20-24. (Canceled)

A33 25. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream, wherein the encrypted bit stream is previously generated by encrypting, from among the scene description data and the plurality of object data, at least predetermined object data corresponding to specified objects, and the predetermined object data is predetermined among the plurality of object data;

deciding whether the scene description data has been encrypted as encrypted scene description data in the encrypted bit stream or is unencrypted scene description data, and deciding whether each of the plurality of object data have been encrypted as encrypted object data in the encryption bit stream or are unencrypted object data;

if the scene description data is decided to have been encrypted, decrypting the encrypted scene description data;

decrypting the encrypted object data to produce respective decrypted object data; and

displaying the scene based on the scene description data, the decrypted object data, and the unencrypted object data.

26. (New) A data processing apparatus for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, and for use with an encrypted bit stream read from a storage medium or received through a transmission medium, wherein the encrypted bit stream is previously generated by encrypting, from among the

scene description data and the plurality of object data, at least predetermined object data corresponding to specified objects, and the predetermined object data is predetermined among the plurality of object data, said apparatus comprising:

a decryption device operable to decrypt encrypted scene description data and/or encrypted object data included in the encrypted bit stream according to a first control signal, to produce decrypted data;

a display device operable to display the scene based on the decrypted data according to a second control signal; and

a controller operable to:

decide whether the scene description data has been encrypted as encrypted scene description data in the encrypted bit stream or is unencrypted scene description data, and decide whether each of the plurality of object data have been encrypted as encrypted object data in the encryption bit stream or are unencrypted object data;

control said decrypting device with said first control signal to decrypt: the encrypted scene description data if said controller decides that the scene description data has been encrypted; and the encrypted object data to produce respective decrypted object data; and

control said display device with said second control signal to display the scene based on the scene description data, the decrypted object data, and the unencrypted object data.

27. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream, wherein the encrypted bit stream is previously generated by encrypting, from among the scene description

data and the plurality of object data, at least predetermined object data corresponding to specified objects, and the predetermined object data is predetermined among the plurality of object data;

deciding whether or not encrypted object data corresponding to the specified objects is reproducible; and

performing reproduction of all object data when said deciding indicates that the encrypted object data is reproducible, said reproduction including decryption of the encrypted object data corresponding to the specified objects and display of the object data.

28. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream, wherein the encrypted bit stream is previously generated by compressing the plurality of object data to produce a plurality of compressed object data, and encrypting, from among the scene description data and the plurality of compressed object data, at least predetermined compressed object data corresponding to specified objects, and the predetermined compressed object data is predetermined among the plurality of compressed object data;

deciding whether or not compressed and encrypted object data corresponding to the specified objects is reproducible; and

performing reproduction of all object data when said deciding indicates that the compressed and encrypted object data is reproducible, said reproduction including decryption of the compressed and encrypted object data corresponding to the specified objects, and decompression and display of the object data.



29. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream, wherein the encrypted bit stream is previously generated by compressing the plurality of object data to produce a plurality of compressed object data, and encrypting, from among the scene description data and the plurality of compressed object data, at least predetermined compressed object data corresponding to specified objects, and the predetermined compressed object data is predetermined among the plurality of compressed object data;

decrypting the encrypted bit stream to produce compressed object data corresponding to the specified objects; and

decompressing the compressed object data corresponding to all objects which compose the scene, to produce restored object data, wherein said decompressing includes writing the restored object data corresponding to all objects onto reference memories and reading from the reference memories in such a way that the restored object data is subjected to secondary encryption before it is written onto the reference memories and the restored object data is subjected to decryption for decrypting the secondary encryption after it is read from the reference memories.

30. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream, wherein

the encrypted bit stream is previously generated by compressing the plurality of object data to produce a plurality of compressed object data, and encrypting, from among the scene description data and the plurality of compressed object data, at least predetermined compressed object data corresponding to specified objects, and the predetermined compressed object data is predetermined among the plurality of compressed object data;

decrypting the encrypted bit stream to produce compressed object data corresponding to the specified objects; and

decompressing the compressed object data corresponding to all objects which compose the scene, to produce restored object data, wherein said decompressing includes writing the restored object data of the respective objects onto corresponding reference memories and reading from the reference memories in such a way that each of the restored object data is written onto a corresponding reference memory after it is subjected to secondary encryption and each of the restored object data is read from the corresponding reference memory and then subjected to decryption for decrypting the secondary encryption.

31. (New) A data processing apparatus which reads an encrypted bit stream from a storage medium or receives the encrypted bit stream through a transmission medium and performs reproduction of the encrypted bit stream, said data processing apparatus being for use with scene description data and a plurality of object data,

wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; the scene description data describes how the plurality of objects compose the scene; the encrypted bit stream is obtained by compressing the plurality of object data to produce a plurality of compressed object data, and encrypting, from among the scene description data and the plurality of compressed object data, at least predetermined compressed object data corresponding to specified objects; and the predetermined compressed object data is predetermined among the plurality of compressed object data;

said data processing apparatus comprising:

a decryption unit operable to decrypt the encrypted bit stream to produce decrypted data;  
a plurality of data decompressors respectively provided for the plurality of objects, operable to decompress corresponding compressed object data included in the decrypted data, to produce decompressed object data; and

a plurality of memories respectively provided for the plurality of objects, operable to store corresponding decompressed object data, wherein

each of said plurality of data decompressors includes an encryption unit operable to subject the decompressed object data to secondary decryption before it is output to a corresponding memory, and a decryption unit operable to decrypt the secondary encryption of the decompressed object data after it is read from the corresponding memory.

32. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream including display of an image, wherein the encrypted bit stream is previously generated by encrypting, from among the scene description data and the plurality of object data, at least predetermined object data corresponding to specified objects, and the predetermined object data is predetermined among the plurality of object data;

extracting the scene description data from the encrypted bit stream; and

limiting the display of the image such that an image based on the object data corresponding to each of the specified objects is prevented from being displayed individually, according to the scene description data.

33. (New) A data processing method for use with scene description data and a plurality of object data, wherein: the plurality of object data respectively correspond to a plurality of objects which compose a scene; the plurality of object data includes object data as video data or audio data; and the scene description data describes how the plurality of objects compose the scene, said method comprising:

reading an encrypted bit stream from a storage medium or receiving the encrypted bit stream through a transmission medium, and performing reproduction of the encrypted bit stream including display of an image, wherein the encrypted bit stream is previously generated by encrypting, from among the scene description data and the plurality of object data, at least predetermined object data corresponding to specified objects, and the predetermined object data is predetermined among the plurality of object data;

deciding whether or not encrypted object data corresponding to all the specified objects has been decrypted; and

displaying the image based on the object data corresponding to the specified objects when deciding that the encrypted object data corresponding to all the specified objects has been decrypted.